DSS BIOTERRORISM RESPONSE PLAN MODEL

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Bioterrorism is the use or threatened use of microorganisms or toxins to produce disease and/or death in humans, animals or plants. Bioterrorists undertake such actions to create fear and intimidate governments in the pursuit of ideological, political, or religious goals. Biological agents are hard to detect upon release and they are nondiscriminate killers. Terrorists can protect themselves from the release and escape prior to the effect as it may take days to produce disease.

I. TYPES OF BIOTERRORISM

<u>Anthrax</u> – Or woolsorters disease, caused by the spore-forming bacteria *Bacillus anthracis*. Its spores are very hardy and are found in soil worldwide. The disease is naturally occurring in herbiferous animals (sheep, goats, and cattle) and sometimes humans in high-risk occupations or in the underdeveloped world. **Symptoms:** Spores enter through broken skin. An itchy papule progresses to a vesicle, then an ulcer, then becomes a black lesion. Inhalation anthrax is difficult to diagnosis without an X-ray or test. It is not spread person-to-person.

<u>Botulism</u> – A paralytic disease caused by a neurotoxin produced by a common soil bacterium *Clostridium botulinum*. The bacteria are readily available worldwide, such that a terrorist with knowledge and facilities could produce and harvest the toxin. The toxin causes muscle paralysis by preventing the release of acetylcholine at neuromuscular junctions. **Symptoms:** Gastrointestinal symptoms, double or blurred vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth, muscle weakness which descends through the body. It is not spread person-to-person.

<u>Tularemia</u> – A natural bacterial disease, normally occurring in rural areas, transferred via the bite of infected arthropods (deerfly, mosquito, tick), handling infected tissues, inhalation of aerosols, or ingestion of contaminated food and water. **Symptoms:** Fever, malaise, headache, chills, fatigue and pain in the enlarged lymph nodes. It is not spread person-to-person.

<u>Smallpox</u> – Can be produced in large quantities, is stable in storage and transport, produces a stable aerosol, is highly virulent, and has a high mortality rate. **Symptoms:** High fever, malaise, headache, and backache. A rash appears thereafter in the mouth, pharynx, face, and arms, then spread to the rest of the body. It is readily spread by person-to-person contact.

<u>Plague</u> – (pneumonic plague) If delivered by aerosol, would produce a quick and deadly outcome. The bacteria in the lungs rapidly replicate and patients become infectious to others via sputum and blood. **Symptoms:** High fever, chills and severe pneumonia. Small droplets would spread the infection by person-to-person contact in a cough or sneeze.

<u>Typhus</u> – A louse-borne disease caused by *Rickettsia prowazekii* that has been prevalent in times of war and famine in the past. Crowding, poor hygiene and colder climes favor this debilitating and often fatal disease. Virus can be transmitted by the bite of fleas or the inhalation of infected louse feces. **Symptoms:** Headache, chills, prostration, fever, pain and a skin rash. It is not spread person-to-person.

<u>Naegleria</u> – A free-living ameba that can become a parasite of humans that almost always results in death. The organism found in surface waters and pools, enters the body through the nose after which it travels along the olfactory nerve to the brain where it causes destruction of the lower cerebrum and cerebellum. It is not spread person-to-person.

<u>Yellow Fever</u> – A viral disease endemic to tropical areas of the world where its vector, certain species of mosquitoes, thrives. It is not spread person-to-person.

<u>Lassa Fever</u> – This viral fever has bioweapons potential because it can be transmitted by person-to-person contact with aerosols, blood or urine and has a high mortality rate.

II. HOW TO REPORT KNOWN OR SUSPECTED BIOTERRORISM INCIDENTS (EMERGENCY)

- Call the Chemical and Biological (CB) Hotline at 1-800-424-8802.
 - This serves as an emergency resource to request technical assistance during a CB incident.
 - Trained operators staff the CB Hotline 7 days a week, 24 hours a day.
 - It is a joint effort of the Coast Guard, Federal Bureau of Investigation (FBI), Federal Emergency Management Agency (FEMA), Department of Health and Human Services (DHHS), and the Department of Defense (DoD).
 - Non-emergency questions should be directed to the Bioterrorism Preparedness and Response Program at 404-639-0385.
- Contact the local police or other law enforcement agency and/or the local health department.

III. WHAT TO DO WHEN TOLD TO EVACUATE

- Listen to a battery-powered radio and follow local instructions.
- Take as few cars as possible.
- If there is time, employees may be able to go to their own homes.
- Employees may have to "shelter in place" at their place of employment (see Part IV).

IV. SHELTER IN PLACE PROCEDURES (To be incorporated into local Emergency Procedures.)

Depending upon the supply budget and storage space, each office should maintain an Office Disaster Supply Kit containing three days of supplies as suggested below. Employees are also encouraged to stock their own Personal Disaster Supply Kits, and bring them to work to keep in their office. The supplies should be in one container, ready to "grab and go." Each employee is also encouraged to create a "car kit" to be stored in their car at all times. It should include food and water supply for 3 days, as well as flares, jumper cables and a blanket.

Water

A normal active person requires at least 2 quarts of water daily. Children, nursing mothers and ill people require more. Very hot temperatures can double the amount of water needed by all. In addition to drinking water, water will be also needed for sanitary purposes and possibly for cooking.

Each employee should bring 1 or 2 gallons of water from home (can be tap water). The water should be stored in thoroughly washed plastic, fiberglass or enamel-lined metal containers. Do not use glass. Milk or juice bottles work well. Employees should mark the bottles with their name. The stored water should be changed every six months.

Food

Healthy people can survive on half their usual food intake for an extended period or without any food for many days. Food, unlike water, may be rationed safely, except for children and pregnant women. Employees should store some canned foods, dry mixes and other staples that do not require cooking, water or special preparation. Supplies should include a manual can opener. The canned foods should be stored in a dry place where the temperature is fairly cool, and items should be replaced every six months. Canned goods that become swollen, dented, or corroded should be discarded.

Suggestions for food items to include in the supply kit are: ready-to-eat meals, fruits, and vegetables; canned or boxed juices, milk, and soup; high-energy foods like peanut butter, jelly, low-sodium crackers, granola bars, and trail mix; vitamins; foods for infants or persons on special diets; cookies; hard candy; instant coffee; cereals; and powdered milk.

Clothes and Blankets

Employees are encouraged to bring a change of clothes and a small blanket to work to keep in their office. Each office should have a supply of blankets.

Medications

If possible, employees are encouraged to keep a 3-day supply of medications that are considered "life threatening" if not administered daily in their personal disaster supply kit.

First Aid Kit

Each office must have a First Aid Kit, which should include, at a minimum: assorted sizes of bandages, cleansing agents (alcohol, peroxide, soap, germicide), antibiotic ointment, latex gloves, petroleum jelly, scissors, thermometer,

Hygienic Supplies

Each office should have a supply of toilet paper, paper towels, and antibacterial soap.